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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,476	08/31/2001	Satoru Tange	SHC0146	1537

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BAKER & DANIELS
111 E. WAYNE STREET
SUITE 800
FORT WAYNE, IN 46802

EXAMINER

CHAN, SING P

ART UNIT	PAPER NUMBER
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1734

5

DATE MAILED: 04/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,476

Applicant(s)

TANGE, SATORU

Examiner

Sing P Chan

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim recites the steps of secondary extension and secondary contraction of the jointed first and second webs subsequent to step (e) of superposing the first and second web in claim 1 and prior to jointing of the first and second webs in an intermittent matter. However, as noted in the specification and in Figure 2, the secondary extension and secondary contraction steps are originally disclosed as being performed after the first and second webs are jointed in an intermittent manner in one direction, i.e. after step (f) in amended claim 1 from which claim 2 depends. (See Claim 2, line 3, Specification, page 3, line 14 to page 4, line 7 and Figure 2) The original specification does not disclose or suggest performing the noted extension and contraction prior to the intermittent jointing as is now claimed.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, it is unclear what is the applicant intends to claim since step (e) of claim 1 recites the superposing of the webs and it is also unclear what is meant by the applicant of "the thermoplastic synthetic fibers are engaged with each other by at least one of mechanical entanglement and fusion bonding" and "are disengaged so that they are individualized." For the purpose of examination, it is assume step (f) is intended and the fibers are engaged at the bonding sites and disengaged as individual fibers at non-bonding sites. (See claim 1, lines 12-15 and claim 3)

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boich et al (U.S. 5,683,787) in view of Strawinski (U.S. 2,867,560).

Regarding claim 1, Boich et al discloses a method of producing a multi-layered elastic sheet. The method includes the steps of continuous feeding a layer of non-elastic fiber or filament layer and elastic layer of homogeneous film or sheet, positioning the non-elastic layer on to the elastic film or sheet, and jointing them together at

mutually spaced-apart connection sites. (See Col 4, lines 61-66 and Figures 4 and 5) Boich et al does not disclose the steps of extending the elastic film in one direction and allowing the elastic film to retract. However, extending and retracting an elastic film prior to bonding to additional webs are well known and conventional to one in the art as shown for example by Strawinski. Strawinski teaches the stretching of elastic film prior to bonding to paper fiber layer. The elastic film is stretch to a predetermined extent in two directions. After the film has been stretched to an order of ten or more times the original area, the film is allowed to shrink or relax to about five to ten percent of the fully stretched area and then exterior webs are brought into contact with the film to be bonded. (Col 2, line 38 to Col 3, line 51)

It would have been obvious to one skilled in the art at the time the invention was made to pre-stretch an elastic film and allow the film to retract or relax to reduce internal tension and the tendency to pin hole during subsequent heat treatment prior to bonding to additional external webs as taught by Strawinski. The process makes the film tougher and easier to handle.

Regarding claim 2, Boich et al discloses the composite sheet, once jointed by the calender rolls at selected connection sites, are drawn by an extension apparatus and then allowed to relax back to approximately original dimensions. (Col 6, lines 7-15)

Regarding claim 3, Boich et al discloses the inelastic fiber is bonded to the elastic layer by melting or adhesive and the bonded fibers would be unable to detach themselves from the connection site and the fibers in the remainder area are individualized fibers. (Col 2, lines 46-61)

Regarding claim 4, Boich et al teaches the fiber chosen for the second web comprises of thin, long fiber of less than 0.1 dtex and a weight basis between 2 to 10 g/m² to provide a soft and fluffy surface while give a large absorption and take-up capacity for liquid. (Col 2, line 64 to Col 3, line 3 and Col 3, lines 38-52) Boich et al is silent as to the composite sheet includes at least two second webs joined to the top and bottom surface of the first web. However, jointing two second webs onto the top and bottom surface of the first web is well known and conventional as shown for example Strawinski. Strawinski discloses exterior webs are brought into contact with the interior layer or film, which is tacky and allow the exterior layers to adhere. (Col 3, lines 45-55)

It would have been obvious to one skilled in the art at the time the invention was made to bond at least two second webs onto the top and bottom surface of the first web as taught by Strawinski in the method of Boich et al to provide a thin, soft, pliable, and absorbent sheet material that is easy to handle and use and distinguishing the second webs by different weight basis.

Regarding claim 5, Boich et al discloses the first web is a homogeneous sheet or film. (Col 4, lines 61-64)

Regarding claim 6, Boich et al discloses the fibers for the second web are continuous fibers form by melt-spinning or melt-blowing process. (Col 4, lines 13-16)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sing P Chan whose telephone number is 703-305-3175. The examiner can normally be reached on Monday-Friday 7:30AM-12:00PM and 1:00PM-4:30PM.

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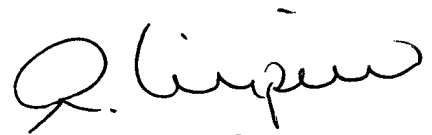
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Sing P Chan
Examiner
Art Unit 1734

spc
April 22, 2002



RICHARD CRISPINO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700